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ABSTRACT

One of two workshop modules developed to be used in training vocational teacher education personnel how to adapt, utilize, and implement performance-based teacher education (PBTE) curricula materials, this module (X-101) was specifically designed for the leadership teams who attended the two national workshops conducted as a part of the National Institute for Performance-Based Teacher Education, Second Phase. (Included in the ERIC system in separate documents are a final report of the national institute, CE 014 260, and the other workshop module, CE 014 160, which was designed for the teacher educators and other leaders who participated in the institute's twenty-four on-site workshops.) This module contains an introduction and seven sequential learning experiences. An overview precedes each learning experience and provides a brief description of the activities involved. The first six learning experiences are designed to provide needed background information and practice situations. The final learning experience requires that the user adapt, utilize, and implement PBTE vocational curricula within his own institution. (A report of a subsequent PBTE national workshop and related training materials are also available in the ERIC system under the following CE numbers: 013 792-795). (BM)

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ADAPT, UTILIZE, AND IMPLEMENT PBTE CURRICULAR MATERIALS

Module X-101

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Prerequisites To complete this module, you will need knowledge of the state of the art of Performance-Based Teacher Education and Performance-Based Vocational Teacher Education. This knowledge may be acquired using the following publication:

- Performance-Based Teacher Education: The State of the Art: General Education and Vocational Education

If you wish to use this publication to acquire the prerequsite knowledge, you need to read the entire document.

If you have acquired the prerequisite knowledge in some manner other than by reading the above publication, check with your resource person to see if you need to read the above publication.

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INTRODUCTION

Performance-based instructional concepts and materials have great potential for improving the effectiveness of our vocational teacher education programs. To effectively use and evaluate performance-based professional vocational teacher education curricula, however, requires knowledge and skills that are quite different from those used in traditional teacher preparation programs. Because of these important differences, it is essential that persons who plan to use performance-based teacher education (PBTE) materials and implement PBTE programs be adequately prepared for those important tasks. Because of the responsibilities that will face them, they need to: (1) acquire basic knowledge of what already has been done by PBTE program developers and implementers, (2) obtain a solid understanding of the underlying rationale and concepts of such programs, (3) be thoroughly familiar with the changing roles of the instructor and student in such programs, and (4) know recommended procedures and techniques for designing and implementing such programs.

Without adequate preparation in the skills necessary to properly use the curricular materials, their potential for improving our vocational teacher preparation programs will be less than fully realized. The goal of preparing more competent and more effective teachers, who in turn can help their students better fulfill their career and personal goals, is too important to not agressively seek attainment. Your role as a resource

person, or manager of the instructional process, in a performance-based program will change considerably from the traditional role of professors and instructors. Hence, it is reasonable that we prepare you as well as we can for that changing role.

We have chosen the modularized approach to achieving the objectives of this workshop because we want to "practice what we preach." We are asking you to use modularized materials with your students upon returning to your state and institution and, therefore, felt you should learn what you need to know by the same process. This module and the various learning experiences and activities within it have been designed with exactly that in mind. We view your roles as program designer and/or resource person as vital to the successful use of the performance-based materials developed by The Center. This module addresses, through a wide variety of individual, small-group, and large-group experiences, the competencies you need to effectively carry out your role and responsibilities.

Module Structure and Use

Organization This module contains an introduction and seven sequential learning experiences. Overviews, which precede each learning experience except the final one, provide at a glance brief descriptions of what each learning experience entails.

Two types of objectives form the basis of the learning experiences: a terminal objective and enabling objectives. The enabling objectives are designed to help you achieve the terminal objective. Each learning experience has activities to help you accomplish the objective, and by use of the feedback devices provided, you should be able to determine if you have reached each objective.

The first six learning experiences are designed to provide you with the needed background information, and to give you opportunities to apply that information in practice situations. The final learning experience is designed to allow you to adapt, utilize, and implement performance-based vocational teacher education curricula within your own institution.

Objectives This module includes seven objectives:

Terminal Objective: Within your own institution, adapt, utilize, and implement performance-based vocational teacher education curricular materials *(Learning Experience VII)*.

Enabling Objectives:

1. After a presentation on the concepts and rationale underlying the PBTE approach to teacher education, critique one educator's opinion of PBTE as described in a case study *(Learning Experience I)*.

2. Given presentations on The Center's PBTE program and materials, demonstrate knowledge of the format and use of The Center's PBTE modules *(Learning Experience II)*.

3. For simulated situations, serve effectively in the teacher educator role as resource person, advisor, and evaluator *(Learning Experience III)*.

4. Given alternative approaches for implementing preservice and in-service PBTE programs and materials, develop an appropriate teaching-learning design for implementing PBVTE curricula components in your specific institution *(Learning Experience IV)*.

5. Given an on-site orientation module, plan how you will orient the other persons at your institution who will be involved in using The Center's PBTE materials *(Learning Experience V)*.

6. Given the workshop is almost over, tie up any loose ends *(Learning Experience VI)*.

Resources A list of the outside resources which supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references, and (3) to get assistance in setting up activities with peers. Your resource person should also be contacted if you have any difficulty with directions, or in assessing your progress at any time.

LEARNING EXPERIENCE I

Required

- *Peers* to discuss critiques of the case study.
- *Resource person* to guide your discussion of the case study critiques.

LEARNING EXPERIENCE II

Required

- *Slide/Tape*, "The Performance-Based Professional Education Curricula," Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1975.
- *Resource person* to "walk-you-through" a module.
- *The Module*, "Direct Students in Applying Problem-Solving Techniques," Module C-8, Columbus, Ohio: The Center for Vocational Education, The Ohio State University, June 1975.

- *The Module*, "Direct Individualized Instruction," Module C-18, Columbus. Ohio: The Center for Vocational Education, The Ohio State University, April, 1975.

- *Reference*, Hamilton and Huang, "Resource Person Guide to Using Performance-Based Teacher Education Materials," Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1975.

Optional

- *Sample Center modules* to review.

LEARNING EXPERIENCE III

Required

- *A peer* to role-play a student asking you, the resource person, questions about the modules; and to role-play a resource person to whom you, a student, are directing questions about the modules.

- *Resource person* to evaluate your competency in assessing a teacher's ability to perform a specified competency in a classroom.

- *Vocational Teacher Competency Profile* to use as a reference in assessing student needs.

- *Reference*, "Guide to the Implementation of Performance-Based Teacher Education," by Fardig, Norton, and Hamilton, The Center for Vocational Education, The Ohio State University, August 1975.

LEARNING EXPERIENCE IV

Required

- *Peers* with whom to complete implementation planning activities in a buzz group.

- *Peers* from your state with whom to complete implementation planning activities.

- *Resource person* to evaluate your competency in designing an implementation plan.

Optional

- *Reference*, Norton, Harrington and Gill, "Performance-Based Teacher Education: The State of the Art: General Education and Vocational Education," Columbus, Ohio: The Center for Vocational Education, The Ohio State University, August 1975.

LEARNING EXPERIENCE V

Required

- *The Module*, "Adapt, Utilize, and Implement PBVTE Curricular Materials", Module X-102, Columbus, Ohio: The Center for Vocational Education, The Ohio State University, October 1976.
- *Peers* from your site with whom to complete orientation planning activities.

LEARNING EXPERIENCE VI

Required

- *Miscellanea* such as Estimate of Performance, Workshop Final evaluation, etc.

LEARNING EXPERIENCE VII

Required

- *An actual teacher education institution* in which you can adapt, utilize, and implement PBVTE curricular materials.

Terminology

Optional Activity or Optional Feedback...refers to an item which is not required, but which is designed to supplement and enrich the required items in a learning experience.

Peers...refers to fellow institute participants who are used to (1) role-play students, etc., and (2) participate in seminar-type discussions and planning sessions. Institute participants will be divided into groups for many activities. For site planning activities, participants will divide into groups by State.

Resource Person...refers to the Center's Institute staff members. Each group will be assigned a Center staff member as a resource person, but all the Center's Institute staff will be available throughout the workshop as resource persons.

Learning Experience I

OVERVIEW

After a presentation on the concepts and rationale underlying the PBTE approach to teacher education, critique one educator's opinion of PBTE as described in a case study.

You will be listening to a large-group presentation on PBTE, the reasons for its development as an alternative approach to teacher education, and the characteristics of PBTE programs, and participating in a question-and-answer session following the presentation.

You will be reading the "Case Study," pp. 10-11, which describes one educator's opinion of PBTE, and critiquing that educator's positions.

You will be discussing your critique with the other peers in your group and your resource person.

Join the other workshop participants for a large-group presentation on PBTE, the reasons for its development as an alternative approach to teacher education, and the essential, implied, and desirable characteristics of PBTE programs. During the presentation, note any questions you may have, and raise these during the question-and-answer session following the presentation.

The following case study describes how one educator explained and described the PBTE movement. Some of his views are accurate, some are off-base. Based on your knowledge of the state of the art of PBTE, read and critique the case study. (Questions are listed following the case study to guide you in critiquing the educator's explanation of PBTE). Your critique should be prepared in writing; however, brief notes will be sufficient. Be prepared to discuss your solution in more depth with your peers.

CASE STUDY

Jim Bloom, a teacher educator at Felton State University, was attending the annual AVA Convention. As part of the proceedings later in the week, there were to be several presentations on PBVTE. On the first evening of the conference, Jim became involved in an informal discussion with some fellow teacher educators. At first, they were discussing general matters, but eventually, someone brought up the subject of PBVTE. Jim had read a number of articles on the subject and, since no one seemed to have a clear idea of what PBVTE entailed, Jim volunteered the following synopsis of the PBTE movement:

"Most people agree that PBTE and CBTE mean the same thing; both are teacher education programs that are developed based on identified competencies. There are a lot of validated competency lists available, most of which specify the skills, knowledge and attitudes a teacher should have to be a successful teacher. An institution can choose the competencies they consider important and develop a program around these competencies. PBTE programs do not structure programs via courses; rather, students pursue individual goals independently using instructional packages called modules. Because students are exposed to, and involved in, experiences related to actual teaching competencies, PBTE insures that when a student passes all the written exams covering those essential competencies, he or she is better prepared to teach than in traditional, theory-based programs. In theory, PBTE is ideal, but in practice it is difficult to implement. Too many major organizational changes are involved and too many key questions have yet to be answered. The most critical weakness of PBTE is that it tends to be mechanistic and impersonal. Students are left too much on their own. Furthermore, they acquire a lot of specific unrelated skills without learning to put those skills together. It's sort of like the math situation. We used to have students who could add and subtract, but couldn't apply that knowledge to real situations. With new math, we have kids who know how to approach the solution of a problem, but who can't add and subtract. In teacher education the sequence is reversed, but the same inadequacies are evident. Teacher education programs used to prepare teachers who understood theory, but didn't have specific skills.

With PBTE, teachers are prepared in skills only and lack the needed theory and affective preparation. I mean, it's a good idea and all, but it's too cut and dried. You can train computer programmers that way, but not teachers!"

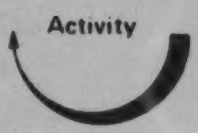
Which of Jim's statements are accurate? Which are incorrect? What facts does Jim need to know in order to have a more accurate and complete picture of PBTE?

Meet with the other members of your peer group and with your resource person, and discuss the case studies and the critiques each of you prepared. Your resource person has a list of model answers and will use these to help guide the discussion.

Learning Experience II

OVERVIEW

Given presentations on The Center's PBTE program and materials, demonstrate knowledge of the format and use of The Center's PBTE modules.



You will be viewing a large-group presentation of a slide/tape on The Center's Performance-Based Curricula Program.

You will be listening to a large-group presentation concerning the research and development phases of The Center's Performance-Based Curricula Program, and participating in a question-and-answer session following the presentation.

You will be listening to a large-group presentation in which you will be "walked-through" a module, and participating in a question-and-answer session following the presentation.

You may wish to read the information sheet, "The Research Base for The Center's Performance-Based Curricula Materials," pp. 16-21.

continued

You may wish to read the information sheet, "The State of the Art of PBTE," pp. 21-31.

You may wish to discuss the "State-of-the-Art Questions," pp. 33-35, or other questions you have identified.

You will be reviewing the module, "Direct Individualized Instruction," and describing in writing the nature and use of the module, using the "Review Guideline Questions," pp. 37-39.

You will be discussing your description of the nature and use of the module with the other members of your group and your resource person.

You may wish to review sample Center modules.

You will be listening to a large-group presentation on the outcomes of advanced field testing of The Center's PBTE Modules.

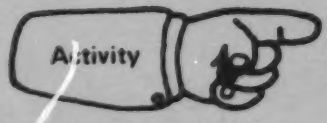
continued

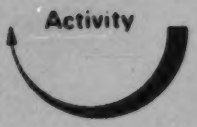
You will be completing Module X-101a, "Construct True-False Items," appended to this module.

Your competency in completing Module X-101a will be evaluated by your peers, using the "Teacher Performance Assessment Form," p. 37 in that module.

You may wish to read the information sheet, "Preliminary Field Testing and Revision of the Center's PBTE Modules," pp. 40-42.

You will be getting a copy of the "Resource Person Guide to Using Performance-Based Teacher Education Materials" by Hamilton and Quinn, and listening to a brief presentation on its contents and use.





Attend the large-group presentation in which the slide/tape, "The Performance-Based Professional Education Curricula" will be shown. This slide/tape is designed to provide a general overview of The Center's Performance-Based Curricula Program. Included in the slide/tape are explanations of (1) the need for PBTE, (2) the characteristics of PBTE, (3) the research base on which the continuing developmental efforts of the Center's project have been built, (4) the developmental and testing process utilized in producing Center modules, and (5) the characteristics and format of Center modules.

Attend the large-group presentation in which the research and development phases of The Center's Performance-Based Curricula Program will be explained in further depth and more detail. Following the presentation, time has been allotted for you to raise any questions you may have as a result of viewing the slide/tape or listening to the presentation on the research and development phases.

Attend the large-group presentation in which a resource person will "walk" you through a module, explaining general module characteristics and specific format techniques in terms of this one module. In addition, the resource person will point out how the Center's modules reflect the characteristics of PBTE.

For a summary of the research phase of The Center's Performance-Based Curricula Program, you may wish to read the following information sheet:

THE RESEARCH BASE FOR THE CENTER'S PERFORMANCE-BASED CURRICULA MATERIALS

The performance-based teacher education curricular materials (modules) which will be used as the basis for instruction in the

institute were developed as part of The Center's Performance-Based Curricula Program during the period August 1971 to July 1975. This section describes the research base which provided a solid conceptual framework for development of the modules.

Research Base

The research base for the Performance-Based Vocational Teacher Education Curriculum was developed in two major phases, and involved approximately 1,000 persons at the state department, university, and school levels. In Phase I, the performance requirements of teachers of conventional vocational programs, namely agricultural, business and office, distributive, health occupations, home economics, technical, and trade and industrial education, were identified. An occupational analysis (introspection, and interviewing of master teachers and vocational teacher educators) of the seven service areas resulted in a preliminary list of 237 tasks.

The tasks were then examined and rated by a 21-member panel representing each of the seven services and 19 states. The panel identified important common and unique tasks by service areas. Two hundred and twenty-six of the 237 tasks were deemed important to the successful vocational teacher.

Next, a national critical incident study involving 750 teachers identified 30 additional tasks and verified the importance of 226 existing competencies. See Figure I on the following page for a graphic illustration of the steps and findings involved in both Phase I and Phase II of the research.

RESEARCH BASE FOR PERFORMANCE-BASED VOCATIONAL TEACHER EDUCATION CURRICULUM

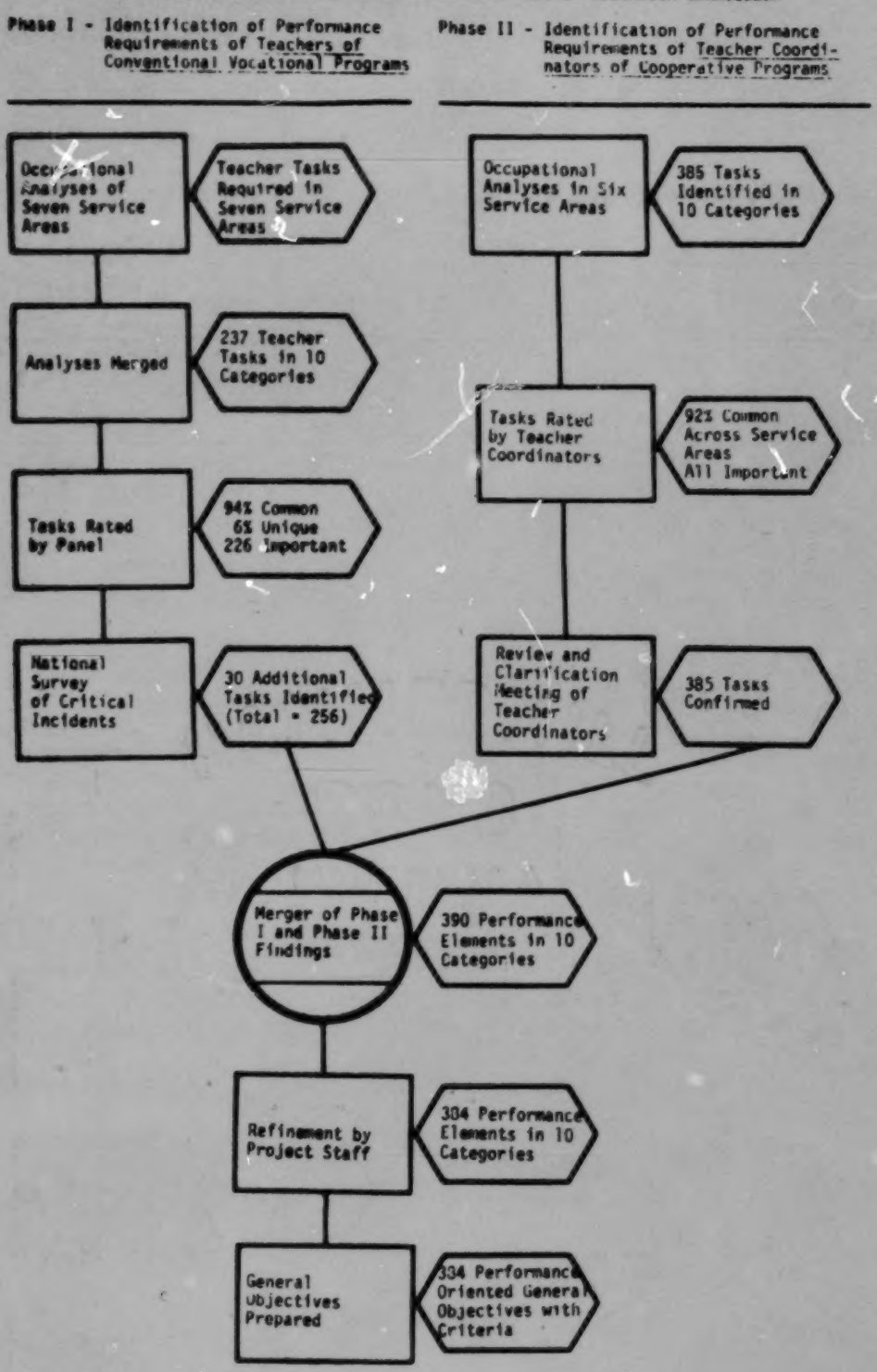

Phase I - Identification of Performance Requirements of Teachers of Conventional Vocational Programs
Phase II - Identification of Performance Requirements of Teacher Coordinators of Cooperative Programs
Occupational Analyses of Seven Service Areas
Teacher Tasks Required in Seven Service Areas
Analyses Merged
237 Teacher Tasks in 10 Categories
Tasks Rated by Panel
94% Common 6% Unique 226 Important
National Survey of Critical Incidents
30 Additional Tasks Identified (Total = 256)
Occupational Analyses in Six Service Areas
385 Tasks Identified in 10 Categories
Tasks Rated by Teacher Coordinators
92% Common Across Service Areas All Important
Review and Clarification Meeting of Teacher Coordinators
385 Tasks Confirmed
Merger of Phase I and Phase II Findings
390 Performance Elements in 10 Categories
Refinement by Project Staff
304 Performance Elements in 10 Categories
General Objectives Prepared
334 Performance Oriented General Objectives with Criteria

Figure 1

Phase II involved identifying the performance requirements of teacher-coordinators of cooperative programs, namely off-farm agricultural, wage-earning home economics, office occupations, special needs, and trade and industrial education. A total of 385 tasks, including those identified in Phase I, were identified through introspection and interview techniques.

A 300-member national task force of outstanding teacher-coordinators (50 from each of the six areas) rated the tasks as to their importance to the successful teacher coordinator. All 385 tasks were deemed important, and 92 percent were of common importance across two or more service areas.

The findings of Phases I and II were then merged into one comprehensive list of 390 performance elements for all teachers of vocational education. After refinement by project staff, the 384 performance elements remaining were organized into the following ten professional categories:

A - Program Planning, Development, and Evaluation

B - Instructional Planning

C - Instructional Execution

D - Instructional Evaluation

E - Instructional Management

F - Guidance

G - School-Community Relations

H - Student Vocational Organizations

I - Professional Role and Development

J - Coordination

Finally, a set of performance-oriented general objectives specifying the task and the general criteria for evaluating a teacher's performance of the stated activity was developed (Cotrell and others, 1972).[1]

For information on the characteristics of PBTE as specified by AACTE and on the scope of recent PBTE efforts, you may wish to read the following information sheet.

INFORMATION SHEET ON THE STATE OF THE ART OF PBTE

"ESSENTIAL DEFINING CHARACTERISTICS OF PBTE"
AS VIEWED BY THE AACTE COMMITTEE

February 1974

A teacher education program is performance-based if

1. Competencies to be demonstrated by the student are
   - derived from explicit conceptions of teacher roles *in achieving school goals,*
   - *supported by research, curriculum and job analysis, and/or experienced teacher judgment,*
   - stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
   - made public in advance.
2. Criteria to be employed in assessing competencies are
   - based upon, and in harmony with, specified competencies,
   - explicit in stating expected levels of mastery under specified conditions, and

---

[1]Calvin J. Cotrell and others, Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives, R&D Series No. 78 (Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1972).

- made public in advance.

3. The instructional program provides for the development and evaluation of the student's achievement of each of the competencies specified.

4. Assessment of the student's competency

   - uses his performance as a primary source of evidence,

   - takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior,

   - strives for objectivity, and

   - *facilitates future studies of the relation between instruction, competency attainment and achievement of school goals.*

5. The student's rate of progress through the program is determined by demonstrated competency.

Essential Characteristics of PB Instruction

In the judgment of the Committee, the essential characteristics of any performance-based instructional program are:

1. The instructional program is designed to bring about learner achievement of specified competencies (or performance goals) which have been

   - derived from systematic analysis of the performance desired as end product (usually that of recognized practitioners) and

   - stated in advance of instruction in terms which make it possible to determine the extent to which competency has been attained.

2. Evidence of the learner's achievement

   - is obtained through assessment of learner performance, applying criteria stated in advance in terms of expected levels of accomplishment under specified conditions and

   - is used to guide the individual learner's efforts, to determine his/her rate of progress and completion of the program and, ideally, to evaluate the efficacy of the instructional system and add to the general body of knowledge undergirding the instructional process.

The foregoing implies, of course, that

1. Instruction is individualized to a considerable extent.
2. Learning experiences are guided by feedback.
3. The program as a whole has the characteristics of a system.
4. Emphasis is on exit requirements.
5. The learner is considered to have completed the program only when he has demonstrated the required level of performance.
6. The instructional performance is not time-based in units of fixed duration.

In addition, a performance-based teacher education program usually has other characteristics, listed as "desirable" in the Elam report:

1. The program is to a considerable extent field-centered--to enhance realism.
2. There is a broad base for decision making--for logistical reasons as well as the requirements of democracy and professionalism.
3. Instruction is often modularized and uses protocol and training materials--to achieve flexibility and realism within the college setting.
4. Professional preparation is career-long--inherent in the concept of the professional teacher.
5. A research component is often built into the program--to enhance the knowledge base on which the profession depends.

The question may reasonably be asked, "How does the Committee's conception of the meaning and implications of PBTE differ in 1974 from what it was in 1971 when the Elam report was prepared?" In three respects:

1. The Committee would now say that the use of modules is not a necessary, defining characteristic of PBTE programs but simply a practice commonly followed in order to facilitate adaptation of instruction to individual needs and abilities. It often helps materially to avoid a rigidly time-based instructional design.
2. The Committee would now place much greater emphasis than earlier on the significance in the design of teacher education programs of stating formal hypotheses and setting up evidence-gathering and record-keeping systems so as to facilitate the testing of such hypotheses. This is in recognition of the key importance of building the knowledge base which it sees as a sine qua non for a full-fledged profession.

3. The earlier report may have given the impression that goals (competencies) which cannot be defined in assessable terms should be eliminated. Not so. The obligation is to strive for clarity, rigor, explicit definition. But if the teacher educator is convinced that something belongs in the program even though he cannot measure it, he should feel perfectly free to include it but recognize that that aspect of his program is not performance-based. It may simply be conviction-based.

Although it was not explicitly stated in the Elam paper, the Committee believes that if a program, or an identifiable portion thereof, does not exhibit the essential characteristics to an appreciable degree, it should not be designated as PBTE. It is perfectly legitimate, however, to be operating a properly labelled teacher education program which is partly performance-based and partly not.

Current Efforts, Models, and Projects*

Major efforts relative to PBTE are currently underway in all academic and vocational areas, for preschool, elementary, secondary, post-secondary, adult, undergraduate, and graduate programs. Developmental, implementation, and dissemination efforts are in process at the local education agency level, college and university level, state level, and at the regional and national levels.

The teacher education project which has probably done the most to foster the careful development of PBTE programs and which has undoubtedly done the most publishing of PBTE resource materials has been the American Association of Colleges for Teacher Education (AACTE). Under the leadership of Karl Massanari, PBTE Project Director, and the Performance-Based Teacher Education Project Committee (established 1970) chaired by J.W. Maucker, the AACTE has already published seventeen booklets in its PBTE series and has recently begun the preparation of technical position papers. The project which is now in its sixth year of operation has also sponsored and conducted numerous national and regional conferences focusing directly on the problems and issues involved in implementing and maintaining PBTE programs. AACTE's efforts, supported by a grant from the U. S. Office of Education, have also focused on determining the state of the art of the national performance-based movement, and on fostering a widespread national dialogue

*Taken from the preliminary draft of The Center's PBTE State-of-the-Art Report (prepared August 1975).

about the progress, prospects, and problems of the movement.

Another national effort launched in 1972 and also supported by the U. S. Office of Education is The Multi-State Consortium on Performance-Based Teacher Education. Perhaps best known for its widely disseminated and read PBTE newsletter, the effort represents a concerted approach by 10 states to promote the cause of PBTE, particularly within their own states. The project, administered by New York State and directed by Theodore E. Andrews, has as one of its primary objectives "the dissemination and communication of information about performance-based teacher education." It has also focused on the implications of PBTE for state certification, on the interstate sharing of information, materials and personnel, and on helping member states develop management systems for performance-based approaches to teacher education.

A third prominent national effort is The National Consortium of CBE Centers. The CBE consortium is an informal association of institutions involved in the development and implementation of Competency-Based Teacher Education. Also supported by the U. S. Office of Education, the consortium consists of nine National CBE Centers, each of which was an outgrowth of the design and development activities initiated in 1968 as the Comprehensive Elementary Teacher Preparation Models. Each of the Centers is involved in conducting CBE research and development activities for implementing preservice and in-service program models,

and in providing developmental assistance and training to others interested in installing competency-based education programs. The Consortium serves to coordinate efforts of the nine Centers, to provide CBE leadership at the national level, and functions as a clearinghouse for providing developmental program assistance.

In order to attain an overview of the extensive and pervasive nature of the many other PBTE, CBTE, and CBE efforts, consider the following list of 44 activities prepared by Allen Schmieder (1975):

State of the Art--Current Activities in Competency-Based Education

1. Seventeen states have mandated the approach as a full new or alternative system for teacher education and certification, 15 others are considering similar action. Several states plan full implementation within the next several years.

2. Approximately 500 institutions of higher education have pilot programs, about 120 have large operating programs, and 15 have institution-wide programs.

3. In 1972 a complete bibliography on the subject had 22 items; a "complete" bibliography finished in 1973 included over 800 items covering 57 different categories.

4. Pilot programs exist for almost every conceivable category of education: adult education, teacher education, education media, library personnel, nuclear radiology, dentistry, etc.

5. Thirty-seven out of 58 national professional associations surveyed in 1974 indicated involvement in competency-based education program development.

6. Six states have mandated both competency-based education and career education as major program priorities.

7. Competency-based examinations have become part of the licensing process for several occupations and professions.

8. A major national commission including 30 prominent educators and political leaders has been formed to spearhead a national research and development program in CBE--the commission is supported by private foundations and is affiliated with the Educational Testing Service of Princeton, New Jersey.

9. Thirty-one states have joined the Interstate Certification Project concerned with the mobility of educational personnel and interstate reciprocity of teaching certificates. A major focus of the 74-75 program is on transferability problems relating to competency-based education.

10. Fourteen states have formed a national consortium for the purpose of sharing information materials and personnel and for helping member states to develop management systems for the development and use of performance-based approaches to teacher education and certification.

11. Leadership representatives from a cross section of educational constituencies--higher education, teacher professional associations, school systems, students, the basic studies, state education agencies, the Federal Government--have formed a National Committee on Performance-Based Teacher Education (sponsored by the American Association of Colleges for Teacher Education) to determine the "state of the art" of the national competency-based education movement and to support a widespread national dialogue about the progress, prospects and problems of the CBE movement.

12. Ten predominantly black colleges have formed a consortium to spearhead the development of competency-based education in small colleges.

13. The Fund for the Improvement of Post Secondary Education supports projects which include a large number of professions and are generally directed at the identification and formulation of competency objectives, assessment for mastering of competencies, and the design and implementation of learning processes which facilitate the attainment of specified competencies.

14. 138 Teacher Corps projects involving as many institutions of higher education and local school systems give high priority to CBE programming.

15. A national occupational competency Testing Institute has been formed at the Educational Testing Service, Princeton, New Jersey.

16. HEW is supporting the development of alternative approaches to staff development for adult educators in all 10 HEW regions. Two regions (II, III) have concentrated on competency-based education, others have focused on related approaches.

17. Ohio State University's Career Education Personnel Development Project (USOE) is developing competencies for teacher education in career education.

18. There is a National Clearinghouse on PBTE at American Association of Colleges for Teacher Education, in Washington, D. C.

19. There is a National Clearinghouse on Individualized Instruction at Georgetown University, in Washington, D.C.

20. There is a National Clearinghouse for CBE in Community and Junior Colleges, University of Florida, Gainesville, Florida.

21. There is a National Clearinghouse for Action Research in CBE, at Bowling Green University, Bowling Green, Ohio.

22. There are nine Regional Competency-Based Education Centers supported by the Office of Education to develop experimental CBE models in teacher education and to provide developmental assistance and training services for those interested in installing CBE programs.

23. The American Bar Association is sponsoring a study of (Hastings Law School, San Francisco) the implications of CBE movement for training of lawyers and for education related court cases.

24. The School Library Manpower Project administers six experimental program models in competency-based library-media education.

25. Over two years the AACTE National Committee has sponsored 10 regional leadership training institutes for over 2,000 educational leaders.

26. A virtual "National Storehouse" of related materials have been developed at colleges, universities and Federally supported educational laboratory and research and development centers, e.g., 145 validated protocol packages, 650 (Gage Catalogue) validated training materials, mini courses, ITU Teachers College Units, Parson's Guided Self Analysis, Interaction Analysis Packages, IGE packages.

27. The Educational Testing Service is developing and testing taxonomy and assessment instruments for identifying and evaluating competencies acquired in domestic and volunteer activities.

28. The Council for the Advancement of Small Colleges is conducting case studies regarding cost effectiveness in a variety of CBE programs.

29. A number of skills and competency banks have been developed at several institutions of higher education and regional education laboratories.

30. Large module banks exist at approximately 10 institutions.

31. Four states have developed state-level generic competency catalogues.

32. The Antioch administered University Without Walls Program provides external degree opportunities for thousands of students through a national network of colleges and universities.

33. The Open University of the United Kingdom enrolls nearly 50,000 students from all walks of life and is the largest educational publisher in the nation.

34. New York State has developed an external degree program in the fields of nursing (AA&BA), business administration (AA) and the liberal arts (AA&BA) (heavy emphasis on life experience and military experience).

35. The Learning Resource Center in Syracuse, New York has a goal of providing competency-based external degrees to 5,000 adults in the next several years.

36. A growing list of institutions have developed CBE programs in school administration, including Alabama A&M University, Bank Street College, University of Connecticut, Florida International, University of North Florida, University of Georgia, Governous State University, University of Kansas, Iowa College, St. John's University, Columbia Teacher's College, University of Houston, Weber State College, University of Utah, University of Vermont.

37. An Institute for Research and Development of Competency-Based Teacher Education Programs has been formed in the College of Education at Wayne State University.

38. The Department of Supervision and Curriculum Development at the University of Georgia is developing a competency-based center in Curriculum and Supervision. A number of other places now have CBE degree programs in supervision, including University of California at Santa Barbara, Florida International University, University of North Florida, Governous State University, Tri State College, Louisiana State University, Weber State College, and the University of Utah.

39. The American Association of School Librarian Division of the American Library Association has formed a committee to develop a competency-based certification model for school media personnel.

40. The Model Legislation Project, working in cooperation with the Lawyers Committee for Civil Rights Under the Law, made an analysis of all state regulations and laws relating to education (developed 3,000 pp. index) and as one consequence, is developing model legislation for competency-based education.

41. Six leading CBE states, working with the National Commission on PBE, are developing plans for coordinating research programs and sharing results.

42. Competency-Based Education is one of the major priority areas in a newly developing Federal Government interest in finding ways to diminish the isolation of formal education. Three Federal agencies (HEW, Commerce, Labor) have formed inter-agency task forces--including one on CBE--to work on the problem.

43. The National Institute of Education is supporting a number of significant CBE efforts--two of the most important being the California Project which is examining relationships between teaching and learning in key subject areas and the Oregon State Project which is developing CBE programs at the high school level. A large number of other NIE projects have important implications for CBE program developers.

44. Experience to date in implementing CBE programs for educational personnel development includes the:
    --conceptualization and initial development of an array of CBE pilots
    --implementation, evaluation, and revision of many of these pilots
    --development of a wide array of instructional materials and resources
    --building of relevant data banks
    --development of new assessment procedures and instruments
    --development of competency lists

Below is a list of "State-of-the-Art Questions" which should have been answered for you during your reading of the state-of-the-art report. If you still need clarification on any of these questions, or others you may have identified, you may wish to discuss these questions further with your resource person and peers.

STATE-OF-THE-ART QUESTIONS

1. What characteristics of traditional teacher education programs have caused educators to be dissatisfied with the status quo and to look for alternative approaches to teacher education?

2. What historical events led up to the emergence of PBTE?

3. What relationship does the funding of Comprehensive Elementary Teacher Education Models have to the preparation of secondary vocational teachers?

4. What organizations and/or groups have done the most to further the development, implementation, and dissemination of PBTE programs, materials, and information?

5. Can PBTE programs and materials adequately include the affective domain?

6. Can PBTE be implemented on a limited budget?

7. Where can one locate additional literature on, and materials for, PBTE programs?

8. What information in the state-of-the-art report was missing or inadequate for your needs?

Review the module, "Direct Individualized Instruction," and demonstrate knowledge of the format and characteristics of The Center's modularized curricular packages by completing the "Review Guideline Questions" listed below. Your written responses need not be detailed; simple, concise notes will be sufficient.

REVIEW GUIDELINE QUESTIONS

1. To what does the phrase "Performance Element No. 115" on the title page refer?

2. Are any prerequisites required for this module and where is this information located?

3. What is the purpose of the "Procedures" section?

4. What types of information are included in the "Introduction" and for what purposes? Give brief examples to support your responses.

5. Skim the overviews and answer the following questions:

   a. What specific activities are provided to give the student cognitive background?

   b. What specific activities are provided to give the student practice in applying that background information?

   c. What optional activities are provided?

   d. Based on your expertise as a vocational educator and a vocational subject matter expert, what additional optional activities could you devise to individualize the package for students in your specific service area?

6. Read the "Overview," p. 51. The second activity asks the student to plan. Where can the student go to find out what to include in this plan?

7. Why is the future tense (e.g., "You will be viewing") used on the "Overview" page?

8. What is the purpose of the color coding?

9. After a student reads the information sheet in Learning Experience I, how does he/she know that he/she has acquired the necessary background information?

10. Read the information sheet for Learning Experience II. One of the activities a student can do is "Visitation and Participation." How could you, as a resource person, be of assistance to a student who is trying to complete this activity?

11. How is a student's plan (Learning Experience III) evaluated?

12. What enabling objective is included in Learning Experience V?

13. At what point, and under what conditions, can the student complete the final experience?

14. Within the "Teacher Performance Assessment Form" is the student required to perform skills acquired through the prerequisite modules? Give evidence to support your answer.

Meet with the other members of your group and with your resource person to discuss your answers to the "Review Guidelines Questions," pp. 37-39.

For the purpose of (1) becoming familiar with the range of modules presently available from The Center, or (2) reviewing the format and structure of other Center modules, you may wish to peruse the sample modules on display in your area.

Join the other workshop participants for a large-group presentation highlighting the major outcomes of the advanced field testing of The Center's PBTE modules.

In order to gain concrete experience in achieving a competency through the completion of a module, to acquire further information on the concepts and principals underlying PBTE, and to experience the role of resource person as evaluator, complete the total Module X-101a, appended to this module.

Each participant will have handed in a completed list of true-false items. These will be redistributed randomly and each participant will then use the "Teacher Performance Assessment Form," p. 37 in Module X-101a to evaluate the true-false items he or she has been given. Your resource person(s) will be available to provide you with assistance on this task, and time will be provided for discussion if necessary.

For a summary of the results of the preliminary testing of the Center's modules, and the revisions made based on those results, you may wish to read the following information sheet.

PRELIMINARY FIELD TESTING AND REVISION OF THE CENTER'S PBTE MODULES

Input received from the consultant reviews and preliminary testing was placed in a revision file and used as the basis for major revision of the module content and format by Center staff and consultants, using a rigorous revision process.

Based on the input received, seven major changes were made in the modules. First, users and reviewers indicated that <u>better directions</u> were needed. For example, students should not simply be told to "role-play," but should be given complete directions for <u>how</u> to do it, including a role description to guide anyone playing a role outside his/her own frame of reference. Users had a tendency to "get lost" in the modules, in that directions for where to go next after completing an activity were sometimes missing or unclear. The revised modules include complete and clear directions for how to use the modules and how activities are to be accomplished.

Second, it was felt that front-to-back sequencing of the modules would make them easier to use. Users complained about the constant "flipping back and forth" necessitated by separating the information sheets and feedback devices from the learning experiences in which they were to be used. In the revised modules, all activities, information sheets, and devices are sequenced in the order in which they are to be used.

Third, users and reviewers indicated that the modules should be more self-contained. Some users had difficulty locating and obtaining outside references required for completion of the learning experiences. Overall, it was felt that including as much of the necessary information as possible within the covers of the module would increase its usability. Thus, with few exceptions, the revised modules contain information sheets covering the performance to be achieved, and seldom require the student to go to outside resources.

Fourth, feedback indicated the necessity for alternate activities when learning experiences require the use of peers (e.g., for role-playing). Some users, particularly in-service teachers, had difficulty locating peers to work with. The revised modules always provide an alternate activity (often in the form of case studies to which the student reacts) when an activity calls for working with peers.

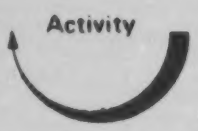
Fifth, users and reviewers called for more flexibility and individualization in the form of optional activities. The revised modules provide enrichment (e.g., a suggested outside reading which

Attend the large-group presentation concerning the document, "Resource Person Guide to Using Performance-Based Teacher Education Materials" by Hamilton and Quinn. Each participant will receive a copy of this document, and a resource person will briefly explain what it contains and how it can be used.

Learning Experience III

OVERVIEW

For simulated situations, serve effectively in the teacher educator role as a resource person, advisor, and evaluator.



You will be viewing a large-group presentation of a slide/tape on the role of the resource person in a PBTE program.

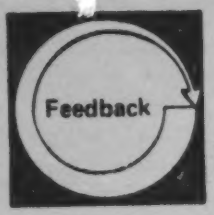
You will be listening to a panel discussion concerning the role of the resource person.

You will be listening to a summary of the panel discussion presented by a Center resource person.

You will be listening to a symposium concerning students' reactions to their use of PBTE modules.

You will be role-playing a resource person who is advising a student concerning PBTE.

continued



You will be evaluating your competency in advising a student concerning PBTE and the student's role in using performance-based curricular materials by assessing and discussing with your resource person and peers the appropriateness of your responses to the "student" in the previous activity.

You will be reviewing the "Vocational Teacher Competency Profile."

You will be reading the "Case Studies," pp. 52-55, and assessing the needs of, identifying appropriate curricular materials for, and providing appropriate advice to, the pre and inservice teachers in at least four of those case studies.

You will be evaluating your competency in assessing student needs, selecting appropriate curricular materials, and advising students by comparing your solutions with the "Model Answers," pp. 57-59.

You will be reviewing the modified "Teacher Performance Assessment Form," for Module C-29, "Present Information with the Chalkboard and Flip Chart."

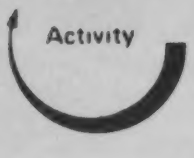
continued

You will be viewing a "teacher" presenting information with the chalkboard, and role-playing a resource person assessing the teacher's performance using the "Teacher Performance Assessment Form."

Your competency in assessing the teacher's ability to perform a specified competency in a classroom situation will be evaluated by comparing your responses with those of another "resource person" and through large-group discussion.

You will be getting a copy of the "Guide to the Implementation of Performance-Based Teacher Education" by Fardig, Norton, and Hamilton, and listening to a brief presentation on its contents and use.

Attend the large-group presentation in which the slide/tape, "The Role of the Resource Person Using The Center's Performance-Based Teacher Education Materials" will be shown. This slide/tape is designed to illustrate the critical nature of the role of the resource person in a PBTE program and to provide an overview of the responsibilities and tasks involved in fulfilling that role.



Join the other workshop participants for a panel discussion on the role of the resource person. The members of this panel are persons who served as resource persons at sites involved in the advanced testing of The Center's modules. They will discuss from their own personal experiences what is involved in acting as a resource person. As you listen to the discussion, note any questions you may have.

Attend the large-group session during which a resource person from The Center will summarize the panel's comments, expand on some topics, reconcile differences, and respond to your questions.

Attend a symposium on the role of the student in a PBTE program. The members of this symposium are students who completed modules as part of their teacher training at institutions involved in the advanced testing of Center modules. Their remarks will focus on their reactions, pro and con, to working with these materials.

Join the other members of your group. Your resource person will assume the role of "student" and select questions from the "Student Questions" below to ask of his/her "resource person." You are one of the resource persons, and should respond to your "student's" questions in that role.

STUDENT QUESTIONS

1. Why are we using modules and not a regular textbook?

2. Why do I have to test out in an actual school situation? Can't you give me a written test?

3. I am preparing to be an office education teacher. Why aren't the examples all from office education?

4. Why do you want me to take this module? I already have this competency.

5. You are never available when I want to meet with you. How can I schedule time with you?

6. I don't have the time to do all these module activities. My other classes demand all my time, and they come first.

7. Do I have to take modules in a certain sequence?

8. Will I need other resources when I take a module?

Your feedback for the previous activity comes from your resource person's and your peer's discussion of the appropriateness of your responses to the "student" in the previous activity.

Review the "Vocational Teacher Competency Profile" in order to familiarize yourself with the titles and categories of the 100 Center modules.

The following case studies describe several situations in which pre and in-service vocational teachers involved in using PBVTE curricular materials come to their resource person for help. Each case study is followed by a question or questions concerning the problems involved. Read the case studies, and based on your knowledge of the teacher educator's role as resource person, advisor, and evaluator in PBTE, devise solutions to at least four of the problems described. As you read each case study, make brief notes as to what you would advise in each case.

CASE STUDIES

1. One of your in-service teachers who is working in an inner-city school comes into your office, obviously upset, and describes what for him has been the worst day of his teaching career. His students have been more rebellious and hard to control than ever, complaining that they are never sure what they are supposed to do, why they're doing what they do in class, or what relevance some of the activities have to their interests and future goals. In addition, the brighter students seem bored half the time, while the slower learners are unable to keep up with the others, especially when reading assignments are involved. The whole day was chaotic, and the teacher even threatens to quit teaching altogether unless his students shape-up and remember that he is the teacher, and they are there to listen and learn, without questioning his authority.

   What category of modules would you suggest this teacher consider taking in order to improve his teaching competence? Why?

   What other specific modules could you suggest he take to get at the instructional problems described?

Does this teacher have an attitudinal problem? If so, can you suggest some modules which might help him come to grips with this?

2. One of your preservice teachers is worried because, in her discussions with friends who are involved in student teaching, she has heard some "horror" stories about problems she has never associated with teaching responsibility--kids taking drugs, girls getting pregnant, family problems interfering with students' schoolwork, etc. Although she has nearly completed her basic course requirements in her teacher education program, she doesn't feel competent to handle such problems.

   What recommendations would you make to this teacher as to additional modules she could take to help give her competence in this area?

3. Your student is having difficulty with the reading level in some of the information sheets in the modules.

   What can you do or suggest to help this student?

4. Your student has been having trouble locating peers to work with in a role-play activity in one of the modules. The student is worried that he/she may not be able to complete the learning experience.

   What can you do to help this student? Has he/she overlooked or misunderstood something?

5. Your student has videotaped his performance for a simulation activity, and is so horrified by his performance and the way he looked on screen that he is thinking of giving up his plans to become a teacher. His performance <u>was</u> terrible.

   What advice would you give this student?

6. Your student is concerned because she finds herself very tempted to sneak a look at the model answers for self-checks and case studies, and just copy them.

   What would you say to this student?

7. Your student complains that he has had to plan three separate lessons for one module, and that seems ridiculous.

   What would you tell this student? Has he overlooked or misunderstood something?

8. Your student has compared her response to a case study problem with the model answer and finds that she has made some points not covered in the model answer. She doesn't know how to rate herself on this activity.

   What do you tell her?

After completing the "Case Studies," compare your answers to the model answers given below. Your responses need not exactly duplicate the model answers; however, you should have covered the same major points.

MODEL ANSWERS

1. This teacher obviously needs help in planning for instruction (Category B). He apparently does not take the needs and interests of his students into account when planning units, lessons, and instructional techniques. The less capable students, for example, need reading materials, etc. specially selected and/or developed for their level of ability, but the teacher seems not to have considered this need when planning his lessons. The fact that the students are floundering around unsure of what they're doing and why indicates that the teacher either needs help in writing clear student performance objectives, or may not be making these expectations public at all.

   This teacher needs to develop his skill in planning instruction for what appears to be a diverse, energetic, and individualistic group of students. Modules such as C-14, "Provide Instruction for Slower and More Capable Students," and C-18, "Direct Individualized Instruction," could give him the specific information and skills he needs to do this planning. Module E-7, "Assist Students in Developing Self-Discipline" could give him insights into how the "chaos" in his classes was created, and how to avoid it in the future.

   There does seem to be a deeper problem here, however, one which involves this teacher's attitude toward teaching, toward his students, and toward his present teaching environment. He needs to think through his personal professional philosophy, and to decide whether he has selected a teaching position in keeping with his beliefs, goals, and qualifications. Modules in Category I, Professional Role and Development, would give him the opportunity to do this sort of "soul searching" and decision making.

2. Modules in the F Category, Guidance, are designed to give teachers skill in gathering data about students and putting this information to use in dealing with students' personal, educational, and vocational needs.

3. Module learning experiences in which cognitive information has been presented very often suggest an optional activity in which students can get together with peers (and/or their resource person) who are also taking the module to clarify and

elaborate on the concepts presented. In addition, the "Resources" section of the "Module Structure and Use" component points out that students should check with their resource person for additional references in their occupational specialty. You could help this student locate alternate sources more appropriate to his reading level. Another possibility is the preparation, by you or another member of your staff, of audiotapes covering the same information.

4. The "Resources" section of the "Module Structure and Use" component points out that students should check with their resource person to get assistance in setting up activities with peers. Your student needs to be reminded, however, that whenever a learning activity requires working with peers, an alternate activity is provided for those unable to locate peers, and that successful completion of the alternate activity constitutes successful completion of the learning experience.

5. First of all, your student needs to be reminded that the performance-based concept allows him to recycle if necessary to develop the skills he is lacking, and to make as many attempts as necessary to demonstrate competency. Then, too, you could explain that students viewing themselves on video-tapes for the first time are often overly concerned with "cosmetic" aspects. Tell him that as his confidence in his teaching skill grows, he will be less concerned with the way he "looks" on screen (partly because he will, in fact, "look" better all around).

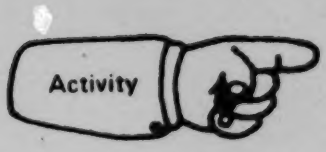
6. You need to remind this student that using the modules effectively requires her to take major responsibility for her own learning, including developing the self-discipline to avoid taking the easy way out. Of course, every module calls for performing the competency in an actual school situation; the student who shortcuts the system may find herself standing in front of a classroom with "egg" on her face. There is another consideration, however, concerning the definition of "cheating." In the process of copying model answers and possibly discussing them with peers who are also taking the module, the student may well be learning. If so, who has been "cheated"?

7. Most modules which call for lesson planning inform the student in the activity directions that if he has completed a learning experience involving developing a lesson plan, he may use the same plan, or a modified version of it, in another learning experience, including the final one. Or, he may use a lesson plan developed for some other module or teaching activity, with your approval.

8. The "Level of Performance" for the model answer tells the student that if she has questions about any additional points she made in her response, she can check with her resource

person. You would need to examine her answer and based on your knowledge of the subject, determine whether these additional points are accurate. If she has covered the same major points as the model answer, then she has successfully completed the activity; however, if her additional points were inaccurate, you would want to discuss these with her to clear up any problems before she proceeds to the next activity/ learning experience.

LEVEL OF PERFORMANCE: Your notes and discussion should have covered the same major points as the model answers. If you missed some points, or have questions about any additional points you made, check with your resource person.



Assume that you are a resource person who will be working with a student taking Module C-29, "Present Information with the Chalkboard and Flipchart." The student wishes to demonstrate competency on the use of the chalkboard in an actual school situation. Review the criteria on the "Teacher Performance Assessment Form," pp. 61-62, to prepare yourself to assess the teacher's performance.

Join the other workshop participants to view the "teacher" presenting information with a chalkboard. Assume the role of the resource person, and assess the teacher's competency in performing this skill, using the "Teacher Performance Assessment Form," pp. 61-62.

Rate the teacher's level of performance on each of the following performance components involved in presenting information with the chalkboard. Indicate the level of the teacher's accomplishment by placing an X in the appropriate column under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was inapplicable, or impossible to execute, place an X in the N/A column instead.

TEACHER PERFORMANCE ASSESSMENT FORM

	LEVEL OF PERFORMANCE					
	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
1. The use of the chalkboard was suitable for the instructional purpose (e.g., it was not used to present information which needed to be saved, etc.).....						
2. The teacher kept the chalkboard and chalk tray clean and free of unrelated materials.....						
3. The material which was presented was written or drawn large enough for all member of the class to see it.....						
4. The teacher eliminated any glare from the clalkboard surface.....						
5. The teacher did not try to present too large a volume of material.....						
6. The teacher did not talk to the chalk-board rather than to the class.....						
7. The teacher did not block students' view of the chalkboard.....						
8. The teacher used the writing surface of the chalkboard efficiently (e.g., material presented was well-organized, uncluttered and well-sequenced).....						

	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
9. If complex or lengthy materials were presented using the chalkboard, the teacher wrote or drew these materials on the board before class.....						
10. If the teacher had material on the board which was not to be used until later in the lesson, the teacher kept the material covered prior to using it.						
11. The teacher used color where appropriate to enhance, simplify, or give contrast to, the material.....						
12. The teacher effectively used the chalkboard to do at least one of the following:						
a. present facts, principles or concepts.....						
b. illustrate concepts, ideas or processes by means of diagrams, drawings, charts, graphs, sketches, maps or cartoons.....						
c. emphasize key factors by outlining, underlining or highlighting.....						
d. present assignments, announcements, definitions, problems to be solved, etc.....						
e. list key words, rules, steps, procedures or policies.....						

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, discuss this with your resource person and, if necessary, the learning experience, or part of it, must be repeated.

View a mini-role-play in which a Center "resource person" will present his/her completed Teacher Performance Assessment Form to the "teacher" and discuss the ratings with him/her. You can compare your ratings to those of The Center's "Resource Person" to evaluate your competency in assessing the "teacher's" performance. Opportunity for discussion and clarification will be provided.

Attend the large-group presentation concerning the document, "Guide to the Implementation of Performance-Based Vocational Teacher Education" by Fardig, Norton, and Hamilton. Each participant will receive a copy of this document, and a resource person will briefly explain what it contains and how it can be used.

Learning Experience IV

OVERVIEW

Given alternative approaches for implementing preservice and inservice PBTE programs and materials, develop an appropriate teaching-learning design for implementing PBTE curricula components in your institution.

NOTE: Although planning for on-site staff orientations is part of planning for implementation, orientation plans will be undertaken in a separate learning experience *(Learning Experience V)*.

You will be listening to a large-group presentation concerning the implemention of a PBTE program.

You will be listening to a panel discussion concerning the factors to be considered in implementing a PBTE program and modularized instruction.

You will be listening to a summary of the panel discussion presented by a Center resource person.

You will be dividing into groups composed of persons from a variety of institutions and addressing the "Program Consideration Questions," pp. 70-73, assigned to your group.

continued

You will be listening to a presentation in which a reporter from each group will describe the outcomes of his/her group's discussion of their question(s).

You may wish to review the descriptions of the established PBTE programs, Appendix D, pp. 71-100, in The Center's state-of-the-art report.

You may wish to review the final reports of last year's Institute sites.

You will be meeting with the other members of your state site group and making tentative implementation plans using the "Plan of Action" Form, pp. 75-76.

The members of your state group will be evaluating your group's competency in developing implementation plans, using the "Program Planning Checklist," pp. 77-79.

Your state group may wish to discuss your implementation plans with a group from another state.

continued

With your state team, polish up any rough edges in your implementation plan that were identified on the "Program Planning Checklist," pp. 77-79.

Join the other workshop participants for a large-group presentation in which a resource person will provide an overview of implementation strategies and concerns.

Join the other workshop participants for a panel discussion on implementation considerations. The members of this panel are persons who served as resource persons at sites involved in the advanced testing of The Center's modules. They will discuss, from their own personal experiences, the strategies they used and problems they encountered in implementing PBTE. As you listen to the discussion, note any questions you may have. Opportunity to raise these questions will be provided.

Attend the large-group session during which a resource person from The Center will summarize the panel's comments, expand on some topics, reconcile differences, and respond to your questions.

Under the direction of a resource person, divide into small groups. Each group should be composed of a mixture of persons from different states and institutions. With your group, discuss the question(s) you have been assigned from the "Program Consideration Questions" below. Appoint one person in the group to serve as a recorder to document comments and later to report to the total group.

PROGRAM CONSIDERATION QUESTIONS

The Program for Change

What groups (or individuals) will be most affected by the change to PBTE?

What persons must be committed to PBTE before it can be implemented?

How can the cooperation of the faculty and staff be best obtained?

What groups outside the institution should be informed or consulted about the PBTE program?

How can outside consultants be used to effect the implementation of PBTE at the institution?

How can the personal and professional needs of the teacher education staff be met in the proposed PBTE program?

What other efforts will need to be made to facilitate change to PBTE?

Program Design

How will competencies/modules be integrated into existing teacher education courses?

How can present courses be converted to individualized, competency-based activities?

How will the teacher competencies be identified for: (a) the preservice program, (b) the inservice professional development program, (c) survival skills for teachers newly recruited from industry?

How will module credits and student requirements be determined?

How will grades for completed modules be determined?

How will individual student programs be designed?

How will students' pre-existing competencies be evaluated and validated?

How will student progress and achievement be recorded?

What provision will be made for students who work at varying rates?

What other factors should be considered in the PBTE program design?

Management of Instruction

What persons will be used as resource persons in the institution?

Who will act as resource persons in the schools or in the field?

How will resource persons be given the training they need?

How can group activities be organized for teachers in the field?

How will the necessary resources be provided for teachers in the field?

How will teachers be given the final assessment in an actual school situation?

What arrangements will be needed to provide for videotaping, peer groups, and other simulation activities?

What arrangements need to be made to ensure that resource persons are conveniently available to students?

What additional management problems will probably need to be solved?

Resources for the PBTE Program

What additional (or reorganized) space or facilities will be required for the PBTE program?

What additional equipment will be needed?

How will a PBTE resource center be provided?

What special instructional materials and resources will be needed?

How can all the needed resources be acquired?

What are the priorities among the needed resources?

What other resources are necessary or desirable for PBTE?

Administration of the PBTE Program

What departmental reorganization should be done to facilitate implementation?

What institution or department policies and/or procedures will need to be changed to accommodate PBTE?

How shall teaching loads be modified to meet the needs of PBTE?

What staff duties will need to be changed or added?

What new staffing requirements will there be?

How shall certification be provided under the PBTE program?

What agreements and arrangements need to be worked out with local school systems?

What other administrative decisions will need to be made to implement PBTE?

Program Costs and Funding

How will PBTE modules and instructional resources be purchased?

How will tuition and fees be assessed?

What extra operational costs (if any) are involved?

What extra program start-up costs are required?

What sources of additional funds are available?

How best may available funds be tapped?

What other financial questions are likely to arise?

Program Evaluation and Refinement

What arrangements will be made to maintain communication and share data with other PBTE institutions?

How will student reaction and response to PBTE be obtained?

What arrangement will be made to gather data on PBTE program effectiveness?

How will data generated in the program be utilized for evaluation and refinement?

Who shall be responsible for evaluating the PBTE program?

What other evaluation questions should be considered?

Join the other workshop participants to hear reports from each of the group recorders. Time for discussion will be provided.

You may wish to review the program descriptions in Norton, Harrington, and Gill, "Performance-Based Teacher Education: The State of the Art: General Education and Vocational Education," Appendix D pp. 71-100, to note how these programs have handled some of the implementation questions.

You may wish to review the final reports of last year's PBTE Institute sites to obtain suggestions for ways of implementing PBTE.

Meet with the other members of your state group. At this point, you should be ready to take the answers proposed earlier in response to the "Program Consideration Questions," and to make tentative program plans for your own institution using the "PBTE Plan of Action Form" below. This form requires you to list the actions to be taken relative to implementation when you return to your state, and to determine the dates on which (or by which) each action is to be taken and the person(s) who will be responsible for each activity. As you complete this form, note any problems or questions that arise.

PBTE PLAN OF ACTION FORM

Actions To Be Taken	Dates	Person(s) Responsible

Actions To Be Taken	Dates	Person(s) Responsible

Review your completed "Plan of Action" and rate your team's level of performance on each of the following performance components involved in planning for the implementation of PBVTE curricular materials. Place an X in the NO, PARTIAL, or FULL column to indicate that the performance component was not accomplished, partially accomplished, or fully accomplished, respectively. If, because of special circumstances, a performance component was inapplicable, or impossible to execute, place an X in the N/A column instead.

PROGRAM PLANNING CHECKLIST

	LEVEL OF PERFORMANCE			
	N/A	NO	PARTIAL	FULL
1. Each question on the list of "Program Consideration Questions," was dealt with.....				
2. Answers provided to the "Program Consideration Questions" seem realistic in relationship to the oragnizational variables and constraints of the institution.....				
3. Basic characteristics of the program model were identified.....				
4. The program design was conceptualized....				
5. Plans were made for student orientation to PBVTE.....				
6. Plans were made for awareness activities for concerned others.....				
7. An outline of procedures for selecting students was prepared.....				
8. Staff responsibilities were assigned.....				

	N/A	NO	PARTIAL	FULL
9. Plans were made relative to the acquisition of the following items:				
a. required resource materials.....				
b. needed equipment.....				
c. optional resource materials.....				
10. Plans were made as to how the resource the resource center would be set up and organized.....				
11. A management system for the resource center was planned.....				
12. Plans were made for arranging for a videotape studio/classroom.....				
13. Plans were made for training personnel to use videotape effectively.....				
14. Procedures for utilizing school field-sites were outlined.....				
15. A student achievement record-keeping system was designed.....				
16. Student grades and credit procedures were developed.....				
17. Plans were made for acquiring the needed additional support funds.....				
18. Plans were made for faculty and staff program seminars.....				
19. Plans were made for organizing the collection of module testing data.....				
20. Plans were made for each of the following activities:				
a. site visits by Institute staff.....				
b. preparation of monthly reports.....				
c. preparation of final site report....				

	N/A	NO	PARTIAL	FULL
21. Dates for the completion of each of the activities were specified.....				

LEVEL OF PERFORMANCE: All items should receive FULL or N/A responses. If any item receives a PARTIAL response, there should be evidence that, although the item is not complete due to time constraints, the item is under consideration and will be completed at a later time. If any item receives a NO response, check with your resource person.

If you have identified another state team whose instructional constraints and variables are similar to yours, you may wish to meet and review each others' plans or brainstorm for solutions in problem areas.

Based on the ratings your plan received on the "Program Planning Checklist," pp. 77-79, finalize and polish your implementation plans together with the other members of your state team.

Learning Experience V

OVERVIEW

Given an on-site orientation module, plan how you will orient the other persons at your institution who will be involved in using The Center's PBTE materials.

You will be getting a copy of Module X-102, "Adapt, Utilize, and Implement PBTE Curricular Materials," and listening to a brief presentation on its contents, and use in on-site orientations.

With the other members of your state group, you will be planning for the on-site orientation of other staff members, using the "Orientation Session Planning Guide," pp. 85-90.

The members of your state group will be evaluating your group's competency in planning for the on-site orientation session, using the "Orientation Checklist," pp. 91-92.

Attend the large group presentation concerning the objectives, time parameters, strategies, and materials for your on-site staff orientation. Each participant will receive a copy of the document, "Adapt, Utilize, and Implement PBTE Curricular Materials," Module X-102, and a resource person will briefly explain what it contains and how it can be used in your on-site orientation.

Meet with the other members of your state group and plan for the on-site orientation of other participating staff members, using the "Orientation Session Planning Guide," pp. 85-90.

ORIENTATION SESSION PLANNING GUIDE

1. When will the on-site orientation take place?

2. What personnel will be involved in the two-day on-site orientation?

   a. For the full two days:

Name	Title (position)

   b. For the first half day:

Name	Title (position)

3. What will be the objectives for your on-site orientation session? See the list of "Suggested Objectives for the On-Site Orientation of Resource Persons" on p. 88. While these should generally be covered, they may be modified and/or others added.

4. Review Module X-102 and determine how it could best be used in orienting staff members to the use of The Center's PBTE materials. Depending on your situation, some activities may need to be expanded, abbreviated, or otherwise modified. On pp. 89-90, rough out a tentative agenda for your on-site orientation, specifying (1) the activities that will be taking place, (2) when they will be happening, and (3) who among the staff will be responsible for conducting or monitoring them.

5. a. What materials and equipment will these activities require (e.g., overhead projector, slide/tape equipment, etc.)?

b. What arrangements need to be made in order to have access to these items?

6. Where will the orientation take place? What arrangements will have to be made to secure this location?

SUGGESTED OBJECTIVES FOR THE ON-SITE ORIENTATION OF RESOURCE PERSONS

At the conclusion of the orientation, each participant (resource person) will be able to:

1. Describe what performance-based teacher education (PBTE) is and give several reasons for its development as an alternative approach to teacher education.

2. Explain the state of the art with regard to PBTE in general, and in vocational education, specifically.

3. Identify the characteristics of PBTE programs and contrast them with the characteristics of traditional programs.

4. Describe the Center for Vocational Education's PBTE professional curricula program.

5. Explain the nature of CVE's program materials and the general procedures used in their development and testing.

6. Identify the role and functions of resource persons in a PBTE program.

7. Describe the implementation procedures and guidelines to be followed in their institution's PBTE effort.

Review your "Orientation Session Planning Guide" and tentative agenda, and rate your group's level of performance on each of the following performance components involved in planning the on-site orientation. Place an X in the NO, PARTIAL, or FULL column to indicate that the performance component was not accomplished, partially accomplished, or fully accomplished, respectively. If, because of special circumstances, a performance component was inapplicable, or impossible to execute, place an X in the N/A column instead.

ORIENTATION CHECKLIST

	LEVEL OF PERFORMANCE			
	N/A	NO	PARTIAL	FULL
The on-site orientation plans specified:				
1. when the orientation would take place...				
2. the personnel who would be involved.....				
3. objectives for the orientation session.				
4. the training activities and strategies that would be used.....				
5. the materials and equipment needed.....				
6. the location of the orientation.....				
7. staff responsibilities.....				
The training activities and strategies are designed to enable each participant to:				
8. describe what performance-based teacher education (PBTE) is and give several reasons for its development as an alternative approach to teacher education.....				
9. explain the state of the art with regard to PBTE in general, and in vocational education, specifically.....				
10. identify the characteristics of PBTE programs and contrast them with the characteristics of traditional programs.....				
11. describe The Center for Vocational Education's PBTE professional curricula program.....				

	N/A	NO	PARTIAL	FULL
12. explain the nature of CVE's program materials and the general procedures used in their development and testing.....				
13. identify the role and functions of resource persons in a PBTE program.....				
14. describe the implementation procedures and guidelines to be followed in their institution's PBTE effort.....				

LEVEL OF PERFORMANCE: All items should receive FULL, or N/A responses. If any item receives a PARTIAL response, there should be evidence that, although the item is not complete due to time constraints, the item is under consideration and will be completed at a later time. If any item receives a NO response, check with your resource person.

Learning Experience VI

OVERVIEW

Given the workshop is almost over, tie up any loose ends.

You will be participating in a large-group session during which you may raise any questions you have that are still unanswered.

You will be receiving instructions concerning expenses, reimbursement, etc.

You will be assessing your competency in being ready to return to the real world by completing the "Estimate of Performance," and will be providing the Institute staff with feedback on your overall workshop experience by completing the "Final PBTE Workshop Evaluation."

You have just been through what we hope were four productive days filled with helpful and effective learning experiences. If you still have some questions you want answered on problem areas on which you would like help, you will have the opportunity to air these concerns during this large group question-and-answer session.

In order to get reimbursed for expenses, you need to complete certain forms. Instructions relative to this paper work will be given at this point.

Evaluate your competency in being ready to return to the real world equipped to adapt, utilize, and implement PBVTE curricular materials by using the "Estimate of Performance," and provide feedback to the Institute staff on your overall workshop experience by completing the "Final PBTE Workshop Evaluation."

Learning Experience VII

FINAL EXPERIENCE

Within your own institution, adapt, utilize, and implement performance-based vocational teacher education curricular materials.

After completing the Institute workshop activities and returning to your own institution, adapt, utilize, and implement PBTE curricular materials. This will include:

1. Finalizing and making operational an appropriate teaching-learning design for implementing PBTE curricular components in your institution.
2. Finalizing plans for the on-site orientation session.
3. Conducting the on-site orientation session.
4. Coordinating implementation and installation activities.

Your total competency will be assessed by you, using the "Teacher Performance Assessment Form," pp. 99-101.

Based upon the criteria specified in this assessment instrument, you will determine whether you are competent in adapting, utilizing, and implementing PBTE curricular materials.

Rate your level of performance on each of the following performance components involved in adapting, utilizing, and implementing PBTE curricular materials. Indicate the level of your accomplishment by placing an X in the appropriate column under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was inapplicable, or impossible to execute, place an X in the N/A column instead.

TEACHER PERFORMANCE ASSESSMENT FORM

In adapting, utilizing, and implementing PBTE curricular materials in your own institution, you:	LEVEL OF PERFORMANCE					
	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
1. made a final determination of the basic characteristics of your program model.....						
2. finalized your program design.....						
3. planned your on-site staff orientation by:						
a. deciding on the objectives for the orientation.....						
b. developing the training activities to be used.....						
c. determining what procedures will be used to evaluate the orientation...						
d. deciding on the personnel who will be involved.....						
4. conducted your staff orientation.....						
5. made a final selection of the specific modules to be used in your program, including:						
a. preservice.....						
b. in-service.....						

	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
c. required						
d. elective and/or optional						
6. sequenced the modules to be used						
7. planned and conducted student orientation to PBVTE curricular materials						
8. conducted awareness activities for concerned others						
9. outlined and implemented procedures for selecting students						
10. planned staff responsibilities						
11. obtained required and optional resource materials and equipment						
12. established and organized a resource center						
13. planned and implemented a management system for the resource center						
14. arranged for videotape studio/classroom facilities						
15. outlined and implemented procedures for using cooperating school field-sites (e.g., for testing students' actual classroom performance)						
16. worked out student grading and credit procedures (e.g., arranged for providing either college credit and/or credit toward certification)						
17. arranged for needed additional support funds						
18. planned and conducted faculty and staff program awareness seminars						

	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
19. prepared for site visits by Institute staff (e.g., made arrangements for interviews with teacher educators, students, and administrators).....						
20. provided The Center with feedback as to all site implementation activities, including:						
a. preparing and submitting bi-monthly progress reports.....						
b. providing feedback during site visits.....						
c. providing feedback during telephone calls from Institute staff.....						

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, discuss this with Institute staff either by telephone or during a site visit, and in keeping with the performance-based concept, if necessary, do it again until it works!

CONSTRUCT
TRUE-FALSE TEST ITEMS

X-10la

PERFORMANCE ELEMENT NO. 150

Performance-Based Curricula Program
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

October, 1976

Prerequisites There are no prerequisites for this module.

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INTRODUCTION

Performance-based instructional concepts and materials have great potential for improving the effectiveness of our vocational teacher education programs. By identifying the competencies needed by teachers and ensuring that prospective teachers actually demonstrate these competencies before being certified, teacher training institutions can be assured of producing better prepared teachers.

To assist teacher educators in designing performance-based teacher education programs, the Program II staff at The Center for Vocational Education, The Ohio State University, have been working since 1967 to (1) identify the professional competencies needed by teachers of conventional vocational programs and of cooperative programs, (2) cluster the resulting 384 competencies into categories and module titles, (3) develop prototype modules in cooperation with vocational teacher educators at The University of Missouri at Columbia and Oregon State University at Corvallis, (4) test and revise those modules, (5) test and refine the revised modules, and (6) assist educators in implementing these modules.

This module is designed to provide you with a hands-on experience in modularized competency-based teacher education. This module, although modified, follows the present format and structure of the 100 PBTE modules developed at The Center. It is hoped that by completing this module, you will get a more realistic picture of what modularized performance-based instruction involves.

Module Structure and Use

Organization This module contains an introduction and three sequential learning experiences. Overviews, which precede each learning experience except the final one, provide at a glance brief descriptions of what each learning experience entails.

Two types of objectives form the basis of the learning experiences: a terminal objective and enabling objectives. The enabling objectives are designed to help you achieve the terminal objective. Each learning experience has activities to help you accomplish the objective, and by use of the feedback devices provided, you should be able to determine if you have reached each objective.

The first learning experience is designed to provide you with the needed background information. The second learning experience is designed to give you an opportunity to apply that information in a practice situation. The final learning experience is designed to allow you to actually construct true-false test items.

Objectives This module includes three objectives:

Terminal Objective: In an actual test-writing situation, construct two to four true-false items for use in evaluating prospective resource persons who have completed a learning activity on the role of the resource person. Your performance will be assessed by your resource person, using the "Teacher Performance Assessment Form," p.37 *(Learning Experience III)*.

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rules for constructing true-false items *(Learning Experience I)*.

2. Given several true-false items developed by a hypothetical teacher to test students on a particular reading, critique those items *(Learning Experience II)*.

Procedure Normally, student progress through these modules is self-paced and students select only those activities that they need or in which they are not yet competent. This section is used to guide them in deciding how much of the module they need to complete. Due to the nature and time constraints inherent in this particular module, this section is not applicable.

Resources A list of the outside resources which supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references in your occupational specialty, and (3) to get assistance in setting up activities with peers or observations of skilled teachers, if necessary. Your resource person may also be contacted if you have any difficulty with directions, or in assessing your progress at any time.

LEARNING EXPERIENCE I

No outside resources

LEARNING EXPERIENCE II

No outside resources

LEARNING EXPERIENCE III

Required

- *A resource person* to assess your competency in constructing true-false test items.

Terminology Resource Person...refers to the person who is guiding you in taking this module and/or the person(s) responsible for evaluating your competency in meeting the terminal objective.

Learning Experience I

OVERVIEW

After completing the required reading, demonstrate knowledge of the rules for constructing true-false items.

You will be reading the information sheet for "Constructing True-False Items," pp. 7-9.

You will be demonstrating knowledge of the rules for constructing true-false items by completing the "Self-Check," p. 11.

You will be evaluating your competency by comparing your completed "Self-Check" with the "Model Answers," p. 13.

For information explaining the rules for developing effective true-false items, read the following information sheet:

CONSTRUCTING TRUE–FALSE ITEMS[1]

Rules for Construction

1. Each statement should be entirely true or entirely false. It is not uncommon to find true-false statements consisting of several clauses, with an introductory clause which is true and a subsequent qualifying clause which is not true.

   FAULTY EXAMPLE:

   > Dogs are mammals, and they are the most intelligent animals with the exception of man.

   Such a statement may confuse the student because it is half true and half false. If the statement were changed to: "The dog is the most intelligent animal," it would be a clear-cut false statement.

2. Trivial details should not make a statement false. A statement should, instead, be a fundamentally false idea.

   FAULTY EXAMPLE:

   > Columbus first landed in the Caribbean Islands in 1493.

   This is a poor statement because 1493 does not represent enough change in the date. The statement might better read, "Columbus discovered America in 1510." In this case the statement is fundamentally false because Columbus did not discover America and 1510 is a date in the century after his first landing in the new world.

3. The statement should be concise without more elaboration than is necessary to give clear meaning. Furthermore, it is desirable to use words having precise meaning rather than words that approximate the desired meanings.

   EXAMPLE:

   > The ancient Egyptians had a polytheist type of religion.

   Lengthening the statement in the following ambiguous manner decreases its measurement value: "The people who inhabited

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[1]Taken from John A. Green, Teacher-Made Tests. Second Edition. (New York: Harper & Row Publishers, 1976), pp. 65-67.

the Nile Valley two thousand years before the birth of Christ worshipped numerous gods, the most important of whom were Seth, the god of evil, and Osiris, the god of good."

4. Exact statements should not be quoted from the textbook. Rather, it is best to modify the wording in order to defeat the rote learner who can identify the words of the text without understanding them.

5. Quantitative terms should be used instead of qualitative terms, whenever possible.

EXAMPLE:

> There have been five Democratic presidents of the United States since World War I.

If the word several were substituted for the word five in the statement above, it would become a qualitative statement which could be given a variety of interpretations. To one person the term several may mean 2, but to another it may mean 30.

6. Specific determiners, which give a cue to the answer, should be avoided.

EXAMPLE:

> Women have a longer life-span than men.

This true statement becomes false when the specific determiner all is included so that it reads, "All women have a longer life-span than men." The statement again becomes true, although ambiguous, when cued with the specific determiner sometimes to read, "Sometimes women have a longer life-span than men." Statements that begin with all or always are nearly always false, whereas statements containing the words sometimes or maybe tend to be true. Furthermore, some test makers consistently begin false statements with the same phrase and start true statements with another overworked phrase. The meaning of the total statement, and not one word or phrase, should be the only cue to the correct answer.

7. Negative statements should be avoided.

FAULTY EXAMPLE:

> Man cannot exist without oxygen.

Although this is a short concise statement, it contains two negatives, cannot and without. The statement would be much improved if it were rephrased to read, "Man needs oxygen to exist." Negative statements tend to be misread by pupils. They do, however, serve the purpose of giving some measurement of the pupil's reading ability.

8. When a controversial statement is used, authority should be quoted. This permits the pupil to judge the correctness or incorrectness of the statement from his knowledge of the authority's stand; otherwise, he has to answer on the basis of his own opinion or guess what the opinion of the instructor might be.

FAULTY EXAMPLE:

Federal aid to public schools is desirable.

A statement such as that above is easily improved by adding an authority reference such as, "President Kennedy believed that federal aid to public schools is desirable." This change permits the pupil to respond on the basis of his knowledge of the authority's opinion rather than placing him in the quandry of responding on the basis of his, or his instructor's opinion.

9. A pattern of answers should be avoided. Teachers tend to include more true than false items in their true-false tests; consequently, the "test-wise" pupil who knows little about the subject being tested can improve his score by marking true all items about which he is in doubt. Sometimes a test may include a pattern, such as two true, one false, two true, one false, so that it is easy for the pupil to determine the answers to items that he does not know. To avoid this difficulty, the teacher should consciously vary the proportion and arrangement of true items and false items.

The fcllowing item checks your comprehension of the material in the "Information Sheet for Constructing True-False Items," pp. 7-9. The item requires a short essay-type response. Please explain fully, but briefly.

SELF-CHECK

1. Many teacher-made tests consist of true-false items because they are felt to be the simplest items to prepare. Based on the nine rules given in the reading, how simple do you think they are to construct.

Compare your written response on the "Self-Check" with the model answer given below. Your response need not exactly duplicate the model answer; however, you should have covered the same major points.

MODEL ANSWER

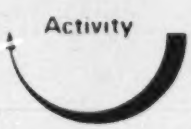
1. True-false items appear to be easy to write. Effective true-false items are deceptively more difficult to construct. One would have to be very careful if one wished to avoid breaking any of the rules given. To develop items which are clear, brief, unambiguous, and entirely true or false requires practice and skill.

LEVEL OF PERFORMANCE: Your completed "Self-Check" should have covered the same major points as the model answer. If you missed some points or have questions about any additional points you made, review the "Information Sheet for Constructing True-False Items," pp. 7-9, or check with your resource person if necessary.

Learning Experience II

OVERVIEW

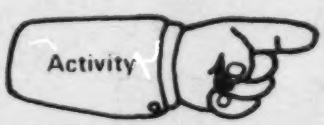
Given several true-false items developed by a hypothetical teacher to test students on a particular reading, critique those items.



You will be reading the material on which the true-false items were based: "Development and Field Testing of The Center's PBTE Materials," pp. 17-20.

You will be reading and critiquing the "True-False Items," pp. 21, developed by a hypothetical teacher to cover the reading.

You will be evaluating your competency in critiquing the true-false items by comparing your completed critique with the "Model Critique," p. 23.



Mr. Gilmore assigned his students to read the following material. Please review this material at this point.

DEVELOPMENT AND FIELD TESTING OF THE CENTER'S PBTE MATERIALS

Following verification of the 384 competencies identified in the research, work was initiated to develop the necessary curricular materials. The materials are especially designed for use in implementing performance-based vocational teacher education programs for all vocational service areas, at both the preservice and in-service levels. The curricular materials are in the form of individualized learning packages, or modules, each of which has as its base one or more of the 384 competencies. By basing the modules on the verified competencies, there is solid assurance that the objectives of the modules acutally represent competencies needed by vocational teachers.

To further ensure that the modules reflect the actual needs of vocational teachers and that the modules appear to the user as likely to deliver on the objectives, the module development process was structured so as to ensure maximum involvement by persons in real world settings. Each module was initially developed in cooperation with persons at institutions and agencies representative of those who will eventually use it. Quality control procedures were built into all steps of this process.

Briefly, the development process involved (1) development of 118 prototype modules at two university sites: The University

of Missouri at Columbia, and Oregon State University at Corvallis; (2) review of each module's accuracy and acceptability by teams of teacher-educators at both sites representing all vocational service areas; (3) review of each module by Center staff; (4) revision of prototype modules by Center staff using all reviews as a basis for changes made; (5) preliminary testing of each revised module by ten or more students at one or more universities; (6) review of each module's usability and effectiveness by students and teacher educators involved in testing the module; (7) review of individual modules and categories of modules by independent consultants and subject matter experts; (8) psychometric refinements of the objectives and assessments of each of the 118 modules by the California Testing Bureau of McGraw-Hill; (9) revision of tested modules by Center staff and independent consultants (reducing the number to 100) using all reviews as a basis for changes made; (10) review of each revised module by Center staff; and (11) final preparation of modules for advanced testing which was conducted at seventeen university sites in the United States, and at one post-secondary institution in Canada.

Throughout this cooperative development process, inputs by faculty and students in actual teacher preparation situations have materially influenced format and content of the modules. The module format is standardized into four major components (1) Title Page; (2) Introduction; (3) Module Structure and Use; and (4) Learning Experiences. Some learning experiences provide students with the information and background knowledge they need

to perform the competency. Other learning experiences give students the opportunity to practice the competency in a simulated situation. The final learning experience always requires the student to demonstrate in an actual school situation that he or she has achieved the competency described in the terminal objective of the module. Each learning experience includes devices which allow the student to get immediate feedback on his or her progress.

The final step in the development and testing process involves final refinement of the modules based on advanced testing results.

Further assurance of the nature and quality of the performance-based materials is provided in the following excerpts from letters written by two members of the National Advisory Panel for the Performance-Based Professional Curricula Program after attending a February 1975 panel meeting.

- The project itself reflects careful thinking and planning. It is quite likely that the products will be the most carefully conceived, produced, and tested in the country. I perceive that many educators, other than in vocational and technical fields, will be interested in modifying them for use with elementary teachers, secondary teachers in other areas, and other post-secondary training programs where teaching is involved (business and industry, military, etc.).

- I was particularly impressed with the systematic procedures that have been and are being followed as the project moves through its various stages. In my opinion, thoroughness is absolutely essential to the accomplishment of a task of this magnitude.

- I was further gratified to see that the actual modules are instructionally sound. This judgement reflects my impression that the instructional system used on each module is well designed and that the content of the modules appears to be substantive. The brief review of actual modules which I made indicated that the content of the instruction is based on well accepted learning principles.

To evaluate his students' comprehension of the information in the assigned reading, Mr. Gilmore developed the following true-false items. Please read each item and briefly critique each item in writing. Indicate what is wrong with the item and how it could be improved.

TRUE–FALSE ITEMS

1. Each module is based on one or more of the 385 competencies. T (F)

2. Quality control procedures were built into all steps of this process. (T) F

3. Modules were never revised without being reviewed by at least 15 consultants. T (F)

4. The module format is standardized into several major components. (T) F

Compare your written critique of the test items with the model critique below. Your critique need not exactly duplicate the model critique; however, you should have covered the same major points.

MODEL CRITIQUE

Item 1--This is an example of an item which is false because of a trivial detail: it says 385 competencies rather than 384. Since what is important is whether or not the modules were based on one or more competencies, the item should be written to evaluate if students grasped that fact.

Item 2--This item is an exact quote from the reading requiring students to remember rote what they've read. The wording of this item should be modified.

Item 3--This item is negatively worded which can throw students off in responding "true" or "false". It should be changed to read "A variety of inputs were used in revising the modules," or something similar.

Item 4--Rather than saying "several," Mr. Gilmore should have used the quantitative word, "four," to produce a clearer item.

General Comment--Notice that his items are set up to form a pattern--F, T, F, T--which is also undesirable.

LEVEL OF PERFORMANCE: Your completed critique should have covered the same major points as the model critique. If you missed some points, or have questions about any additional points you made, review the material in the "Information Sheet for Constructing True-False Items," pp. 7-9, or check with your resource person if necessary.

Learning Experience III

FINAL EXPERIENCE

In an actual test-writing situation, construct two to four true-false items for use in evaluating persons who have completed a learning activity on the role of the resource person.

Review the handout on "The Role of the Resource Person," pp. 27-33. Assume that you had provided prospective resource persons with this handout and now wished to test their comprehension of the material.

Construct two to four true-false items which could be used to test the prospective resource persons on the information in the handout provided.

Your total competency will be assessed by your resource person, using the "Teacher Performance Assessment Form," p. 37.

Based upon the criteria specified in this assessment instrument, your resource person will determine whether you are competent in constructing true-false items.

THE ROLE OF THE RESOURCE PERSON

Critics of programs which use performance-based teacher education (PBTE) modules claim that turning students over to packaged materials to work independently is impersonal and ineffective. Normally we do not start information sheets wit' such negative statements, but this point is critical: the teacher educator must not abandon students to the modules. The Center's PBTE approach absolutely requires the active presence of the resource person to make it work. He or she is vital in (1) orienting students to the PBTE program, (2) helping students select the modules they will take, (3) assisting students in getting needed supplies and materials, (4) arranging small-group and large-group meetings so students have a chance to interact, (5) helping students set up simulations involving peers, (6) providing advice when students encounter problems, (7) supplementing the material in a given module with materials, presentations, and activities drawn from his/her own expertise as a teacher educator, (8) providing students with feedback when it is needed, and (9) evaluating students' final performance.

In our testing experience to date, when students indicated they disliked working with modules, it was generally because they had been asked to work alone on the modules unassisted by a resource person or by fellow students. Typical comments include:

"I couldn't find any peers to work with"

"My resource person was never available"

"I couldn't locate the required videotape"

"I'd already had a course on this topic so this was sheer busywork for me"

"I miss discussing things with my classmates"

Teaching is an interactive process. You cannot teach teachers to interact effectively with students if you give them a module and require them to work in isolation. These modules were not designed for that purpose. Each module provides basic information and activities, but the resource persons are the key to making the modules work. The modules are only a simple tool in teacher preparation. It is up to the resource person to provide additional learning tools and to truly individualize the instructional process to meet students' needs.

Explaining PBTE to Students

In all probability, few of your students will be familiar with PBTE, so your first task is to introduce them to the concept. People tend to be uncomfortable (even antagonistic) when confronted with something unfamiliar. Before they will accept the new, they want to know what it is, what its value is, and how it will affect them. Consider how you feel when someone asks you to taste something unfamiliar and, perhaps, vaguely suspicious in appearance. To avoid such a qualmish reaction you need to tell your students why you have elected to use modules, how using modules requiring performance in an actual school situation can help prepare them to teach, and how your particular program of use is set up.

Another consideration is that students have probably been

exposed primarily to educational systems involving large-group instruction and teacher-centered instruction. They are used to having the teacher take responsibility for teaching, rather than their having to take responsibility for learning. Therefore, they need to be oriented to the new role they are expected to play and to their new responsibilities for learning.

Helping Students Select Modules

In PBTE, students are evaluated on whether they have achieved a particular skill, not whether they have completed a particular module. Thus, another of your tasks as a resource person is to help students identify which modules, or which learning experiences within a module, they need to complete to meet your requirements and their needs. This means that you will have to identify which modules you will use in your course, which are required, and which are optional. You will also have to meet individually with students to determine which skills they already possess. If a student already possesses a particular skill, he or she should need only to demonstrate the competency to specified standards without going through the whole module.

Facilitating Students' Completion of Modules

Most modules include activities (generally optional) which call for outside resources. A student may be asked to present a lesson to a group of peers. The module may suggest supplementary readings. It may be recommended that the student videotape his/her performance for self-evaluation purposes. A module may recommend that the material in the information sheet be discussed further

with peers or with the resource person. A student may be told that it would be helpful to meet with an experienced teacher to discuss a particular concept or to observe that teacher demonstrating a particular skill.

Students may experience difficulties in carrying out these activities if you have not set up guidelines or procedures in advance. You need to devise a system for students to easily locate the equipment, materials, peers, and resource persons they need so that they can complete the module without being forced to jump unnecessary hurdles, or experience unnecessary delays. This system should also include provision for periodic small-group and large-group discussion sessions.

Another part of your system must be designed to ensure that a student with a problem or question concerning an activity has access to you, or another person designated as a resource, within a reasonable amount of time. Specific office hours, periodic class meetings, sign-up sheets, student resource persons can all be used to prevent students from being unable to get a needed answer.

It should be noted that to provide students with advice and answers concerning a given module, it is absolutely critical that any resource person be totally familiar with the content and learning activities of the module involved.

Supplementing Module Activities

Modules were written to be used by teacher educators, not to

replace them! Teacher educators have been specially trained in the professional and/or technical skills needed by classroom teachers. Their expertise and experience are essential to successful use of the modules. As a teacher educator you are undoubtedly aware of numerous materials and techniques which are effective in teaching a particular skill, such as:

- presentations
- guest speakers
- textbooks, periodicals, pamphlets, handouts
- simulations, role-playing situations
- videotapes
- audiovisuals

As mentioned previously, the resource person must be thoroughly familiar with each module that he or she assigns. During the process of familiarizing yourself with a particular module, you should plan how you can supplement the contents of the module. Do you have an excellent handout on the subject? Would students benefit from participating in a seminar at some point in the module? Would a large-group presentation enhance the module activities at some point? Do you have additional tips or practical do's and don'ts you need to convey to students concerning the skill? Is there additional information, unique to the vocational service area in which your students are training, which they need to be aware of? By asking questions of this type as you review each module, you can make the learning experience more effective for your students.

Providing Feedback

Because we recognize the limitations on each resource person's time, we have tried where possible to have students do Self-Checks on their progress, involving the resource person as the evaluator only in the final experience. However, the modules remind students periodically to check with their resource person if they are experiencing problems. If a student does not agree with or understand the feedback provided in the module, you need to provide him or her with additional feedback. Furthermore, as time allows, you should spot check student progress to be sure that each student is using the modules correctly and to provide students with reinforcement and feedback concerning their progress. For example, some students, unused to setting their own pace, may tend to wait until the last minute to complete their module work which seems less pressing. By monitoring their progress, you can detect such problems and take corrective measures.

Evaluating Final Performance

The Center's PBTE modules require that students prove their competency by meeting specified criteria while performing the skill in an actual school situation. It is essential when students are evaluated using the Teacher Performance Assessment Form in the final experience, that the evaluator is qualified to use this form effectively. This means that teacher educators should be familiar with these forms in advance to increase the consistency of the ratings, and that other persons who are asked to use these

forms (e.g., cooperating, or master, teachers) be trained to use them properly. Since the student's competency is assessed during the final experience of each module, it is essential that these forms be used appropriately, objectively, and consistently.

The role of the resource person is indeed a crucial one, requiring, perhaps, a change in emphasis and activity on the part of the teacher educator, but certainly not a change in the need to draw upon all of his or her reservoir of information, experience, and training. Modules are not a substitute for the teacher educator, but simply a way to structure, enliven, and enrich student learning.

The duties of the resource person are many, varied, and in some ways, demanding. The resource person works with students as advisor, helper, instructor, and evaluator. If the resource person can accomplish these duties conscientiously and skillfully, the resulting teacher education program can provide an exciting and growth-producing experience for the teacher, and a professionally satisfying experience for the teacher educator.

Use the space provided to write your two to four true-false items which could be used to test prospective resource persons on the information in the activity provided. Do not put your name on this paper. When you have completed the exercise, remove this page from the module and place it in the box designated by your resource person.

1.

2.

3.

4.

Rate the teacher's level of performance on each of the following performance components involved in constructing true-false items. Indicate the level of the teacher's accomplishment by placing an X in the appropriate column under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was inapplicable or impossible to execute, place a X in the N/A column instead.

TEACHER PERFORMANCE ASSESSMENT FORM

	LEVEL OF PERFORMANCE					
	N/A	NONE	POOR	FAIR	GOOD	EXCELLENT
1. Each statement was entirely true or entirely false.....						
2. Each false statement was fundamentally false, not false because of trivial details.....						
3. Each statement was concise, without more elaboration than was necessary to make the meaning clear.....						
4. Each statement was freshly worded, not copied rote from the reading.....						
5. Quantitative, rather than qualitative, terms were used whenever possible.....						
6. Each item was free of specific determiners (e.g., words such as "all," "sometimes," etc.).....						
7. Negative statements were avoided.....						
8. If a controversial statement was used, an authority was cited.....						
9. A pattern of answers was avoided.....						

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, discuss this with your resource person and, if necessary, the learning experience, or part of it, must be repeated.